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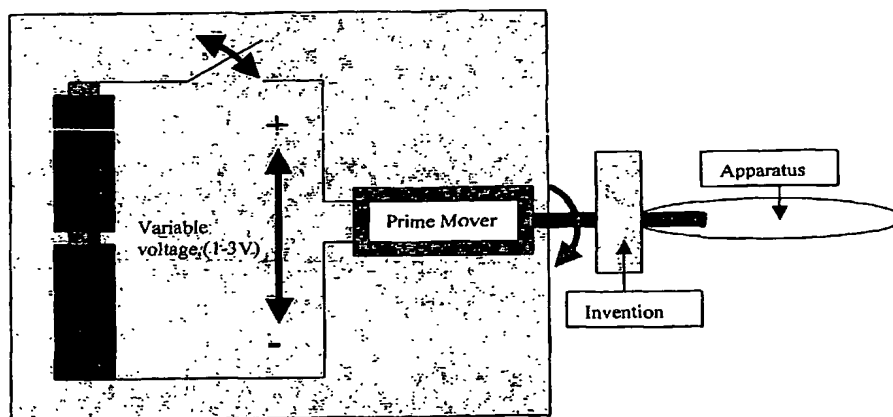
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(54) Title: MOTION CONTROL USING ELECTROMAGNETIC FORCES



(57) Abstract: An apparatus has (a) a first component having one or more electromagnetic elements and (b) a second component having one or more electromagnetic elements and movably coupled to the first component. The second component moves with respect to the first component in a cyclical manner. The one or more electromagnetic elements of the first component interacts with the one or more electromagnetic elements of the second component during each of one or more cycles of motion of the second component with respect to the first component such that, when a constant force profile is applied to move the second component with respect to the first component, the speed of motion increases and decreases one or more times during each cycle of motion due to different levels of electromagnetic interaction between the electromagnetic elements within each cycle of motion.

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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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## B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 675 506 A (NICK A. LEONE) 11 July 1972 (1972-07-11)  column 1, line 8 - line 20; compounds column 2, line 55 - column 3, line 7; figures	1, 4-8, 10-20, 23-25, 35, 36, 38-43
X	US 3 510 705 A (JAMES P. O'NEILL ET AL) 5 May 1970 (1970-05-05)	1-6, 8-12, 19, 20, 23-25, 29, 33, 37
Y	column 5, line 44 - column 6, line 20; figures  ----- -/--	20, 21, 26-28

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X	US 4 168 048 A (RENNER ET AL) 18 September 1979 (1979-09-18)  column 1, line 63 - column 2, line 35; figures	1-6, 8, 12, 19, 24, 25, 29
Y	----- US 2 642 274 A (JR. JOHN H. ANDRESEN,) 16 June 1953 (1953-06-16) column 2, line 19 - column 3, line 37; figures	30, 31
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A	----- DE 42 36 428 A1 (DANA CORP., TOLEDO, OHIO, US) 6 May 1993 (1993-05-06) column 2, line 37 - line 60; figures	1, 29, 34
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